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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/760,592	01/16/2001	Hisashi Kawabata	P/2635-64	4297

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EXAMINER

CHANG, EDITH M

ART UNIT

PAPER NUMBER

2637

DATE MAILED: 09/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/760,592

Applicant(s)

KAWABATA, HISASHI

Examiner

Edith M Chang

Art Unit

2637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on June 10 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-2, 6, 10, 13-15, 20 is/are allowed.
- 6) ☒ Claim(s) 3-5, 8, 9, 11, 12, 16-19, 21 and 22 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments/Remarks***

1. Applicant's arguments filed June 16 2004 have been fully considered. The rejections of claims 1-2, 7, and 13-14 are withdrawn.

### ***Claim Objections***

2. Claims 4-5, 7-9 and 16-17 are objected to because of the following informalities:

Claims 4 & 9, line 10: "said correlation" is suggested changing to "said added signal correlation".

Claim 5, lines 11 & 12: "said synchronization " is suggested changing to "the synchronization".

Claim 7, line 2: "said a phase determining" is suggested changing to "said phase determining".

Claim 16, line 11: "said correlation" is suggested changing to "said added signal correlation".

Claim 17, lines 8 & 10: "said synchronization" is suggested changing to "the synchronization".

Claim 8 is dependent on objected claim 7.

Appropriate corrections are required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 3-5, 8-9, 11-12, 16-19, and 21-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3, line 5: "said order of priority" lacks antecedent basis.

Claim 4, lines 8-9: "said candidate phases" lacks antecedent basis.

Claim 5, lines 6 & 9: "another spreading code sequence" does not clearly indicate the another spreading code sequence is the third one other than the first and second spreading code sequence or the one other than the first spreading code sequence used in the first correlation;

line 13: "said despreading spreading code sequence" lacks antecedent basis.

Claim 8, line 6: "said order of priority" lacks antecedent basis.

Claim 9, line 5: "candidate phases" lacks antecedent basis.

Claim 11, the ranking circuit and the phase setting circuit has no connection with other elements of the synchronization establishing and tracking circuit, and the comprised elements are not able to accomplish the synchronization.

Claim 16, line 10: "said candidate phases" lacks antecedent basis.

Claim 17, lines 5, 6-7 & 10-11: "another spreading code sequence" does not clearly indicate the another spreading code sequence is the third one other than the first and second spreading code sequence or the one other than the first spreading code sequence used in the first correlation;

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Claim 18, line 4: "added semi-synchronous signal" is not understood what is this signal. In claim 13 an added quasi-coherent signal is produced, but the "added semi-synchronous signal" does not recite in this claim or its parent claim to state what it is or how does it being produced.

Claim 19, line 6: "said ranked phases" lacks antecedent basis.

Claim 21, the storing a plurality of ranked phases and setting phase do not have any connection with other elements of the claim, and the comprised steps do not accomplish the synchronization.

Claim 22, line 3: "said quasi-coherent signal" does not clear indicate which quasi-coherent signal the "said quasi-coherent signal" is, there are two quasi-coherent signals in the parent claim 13;

line 7: "said plurality of ranked phases" lacks antecedent basis.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

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Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 11 & 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Garyantes (US 6463048 B1).

Regarding **claim 11 & 21**, In FIG.3 Garyantes discloses a circuit and its method for a CDMA base station comprising: a spreading code generator (the element 40); a correlator (element 30); a raking circuit (element 50); a phase setting circuit (element 60). The multiplexer 60 sets a phase (the states 1 to 5) from the ranking circuit (column 6 lines 20-35).

***Allowable Subject Matter***

7. Claims 1-2, 6, 10, 13-15, and 20 are allowable over prior art.

8. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claims 3-5, 8-9, 16-19 and 22 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter:

Claims are allowable over prior art of record because the prior art of record does not teach or suggest, alone or in a combination, among other things, at least a synchronization establishing and tracking circuit and its method as a whole, the

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combination of elements and features as claimed, which includes the a phase determining circuit determining a first phase of the first spreading code sequence based on an added quasi-coherent signal which is the first and second quasi-coherent signals added together.

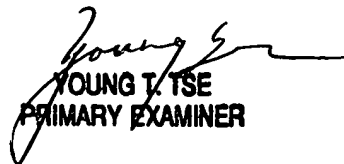
***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edith M Chang whose telephone number is 571-272-3041. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jayanti Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Edith Chang  
August 30, 2004

  
YOUNG T. TSE  
PRIMARY EXAMINER